National Institute of Environmental Health Sciences

Use of a remote car starter in relation to smog and climate change perceptions: A population survey in Quebec (Canada)

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Abstract:

Remote car starters encourage motorists to warm up their vehicles by idling the motor--thus increasing atmospheric pollutants, including several greenhouse gas (GHG) with impacts on public health. This study about climate change (CC) adaptation and mitigation actions examined perceptions on air pollution and climate change and individual characteristics associated with the use of a remote car starter. A telephone survey (n Euro Surveillance (Bulletin Europeen Sur Les Maladies Transmissibles; European Communicable Disease Bulletin) 2,570; response rate: 70%) of adults living in Quebec (Canada) measured the respondents' beliefs and current behaviours regarding CC. Approximately 32.9% (daily car users) and 27.4% (occasional users) reported using a remote car starter during winter. The odds of the use of a remote car starter was higher in the less densely populated central (OR: 1.5) and peripheral regions (OR: 2.7) compared to the urban centers (ex. Montreal). The odds was also higher in population with a mother tongue other than English or French (OR: 2.6) and francophones than anglophones (OR: 2.1), women than men (OR: 1.5), daily drivers than occasional ones (OR: 1.2), and respondents who at least sometimes consulted temperature/humidity reports than those who consulted them less often (OR: 1.5). In multivariate analysis, the perception of living in a region susceptible to winter smog, being aware of smog warnings, or the belief in the human contribution to CC did not significantly influence the use of a remote car starter. The use of remote car starters encourages idling which produces increased atmospheric pollution and GHG production and it should be more efficiently and vigorously managed by various activities. A five-minute daily reduction in idling is equivalent to reducing the total car emissions by 1.8%. This would constitute a "no-regrets" approach to CC as it can simultaneously reduce GHG, air pollution and their health impacts.

Source: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2672360

Resource Description

Communication: ☑

resource focus on research or methods on how to communicate or frame issues on climate change; surveys of attitudes, knowledge, beliefs about climate change

A focus of content

Communication Audience: ☑

audience to whom the resource is directed

Public

Exposure :

weather or climate related pathway by which climate change affects health

Air Pollution, Meteorological Factors, Temperature, Unspecified Exposure

Air Pollution: Ozone, Particulate Matter, Other Air Pollution

Air Pollution (other): NOx

Temperature: Extreme Cold, Fluctuations

Geographic Feature:

resource focuses on specific type of geography

Rural, Urban

Geographic Location:

resource focuses on specific location

Non-United States

Non-United States: Non-U.S. North America

Health Co-Benefit/Co–Harm (Adaption/Mitigation):

specification of beneficial or harmful impacts to health resulting from efforts to reduce or cope with greenhouse gases

A focus of content

Health Impact:

specification of health effect or disease related to climate change exposure

Cardiovascular Effect, Injury, Morbidity/Mortality, Respiratory Effect, Other Health Impact

Respiratory Effect: Asthma

Other Health Impact: Emergency room visits; Hospitalizations

Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Mitigation

Population of Concern: A focus of content

Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Children, Elderly, Low Socioeconomic Status

Other Vulnerable Population: Pre-existing health conditions

Resource Type:

format or standard characteristic of resource

Policy/Opinion, Research Article

Timescale:

time period studied

Time Scale Unspecified